CLAIMS

1. Method for the scalable monitoring of a computer system comprising a plurality of computer equipment units constituting hardware resources to be monitored forming a monitored domain, the method being implemented by means of a central computer system called a manager connected to a communication network that allows the transfer of information between at least one resource and the manager, the method being characterized in that it comprises:

- a step for breaking the monitored domain down into monitored subdomains comprising a predetermined maximum number of resources,

- a step for automatically creating and configuring, for each subdomain, an information synthesis node comprising at least one synthesis agent stored in the storage means of a resource; each synthesis agent is designed to synthesize indicator values calculated and stored in the storage means of at least one resource, these indicators representing an operational status of the resources of the subdomain and being evaluated by indicator agents installed in these resources, each indicator agent being uniquely identified by the name of the indicator it calculates and by the subdomain in which it is installed and being associated with each synthesis agent using the corresponding indicator value,

- a step for modifying the associations between the synthesis agents and the indicator agents when the predetermined maximum number of resources in a subdomain is reached, in order to accommodate the addition or deletion of indicators so that the new architecture of the monitored domain comprises, in each subdomain, a number of resources lower than the predetermined maximum number of resources.

2. Scalable monitoring method according to claim 1, characterized in that the step for configuring a synthesis node comprises, for each synthesis agent:

- a step for searching, in a table stored in the storage means of a resource, for the name of the indicator agent or agents required to calculate the indicator of the synthesis agent

- a step for the subscribing the synthesis agent to the indicator agents found during the search step, this subscription step allowing each synthesis agent to automatically receive, in its subscription table stored in the storage means of a resource, the new values of the indicators found.

3. Scalable monitoring method according to claim 2, characterized in that the search step comprises:

- a step for the sending by the synthesis agent of a notification to a naming service dedicated to storing the associations between a subdomain name, an indicator agent and an indicator, this notification comprising the name of a given subdomain and a given indicator.

4. Scalable monitoring method according to any of claims 1 through 3, characterized in that the modification step comprises:

- a step for installing at least one indicator agent in each new resource added to a subdomain,

- a step for sending, to the synthesis agents requiring the value of the indicator of the new indicator agent or agents, a notification comprising the identification of the new indicator agent or agents,

- a step for subscribing each synthesis agent to the new indicator agents required to calculate the indicator of the synthesis agent.

5. Scalable monitoring method according to any of claims 1 through 4, characterized in that the modification step comprises:

- a step for selecting, for each subdomain, the resources to be deleted

- a step for sending, to the synthesis agents using the value of the indicator of the indicator agent or agents installed in the selected resource or resources, a notification comprising the identification of the deleted indicator agent or agents

- a step for unsubscribing the synthesis agents from the indicator agents whose indications are contained in the notification.

6. Scalable monitoring method according to any of claims 1 through 5, characterized in that the maximum number of resources per subdomain is determined either so that the cost of calculating the indicators is as low as possible, or so that the number of synthesis nodes is as low as possible.

7. Device for the scalable monitoring of a computer system comprising a plurality of computer equipment units constituting hardware resources to be monitored forming a monitored domain, characterized in that it comprises mans for breaking the

monitored domain down into monitored subdomains comprising a predetermined maximum number of resources, means for creating and configuring, in the storage means of a resource, information synthesis nodes comprising at least one synthesis agent stored in the storage means of at least one resource and designed to synthesize indicator values calculated and stored in the storage means of a resource, these indicators representing an operational status of the resources of the subdomain and being evaluated by indicator agents installed in these resources, each indicator agent being uniquely identified by the name of the indicator it calculates and by the subdomain in which it is installed, the configuration of a synthesis agent comprising the storage, in the storage means of a resource, of the associations between the synthesis agent and indicator agents, means for modifying the associations between the synthesis agents and the indicator agents when the predetermined maximum number of resources in a subdomain is reached, so that the new architecture of the monitored domain comprises, in each subdomain, a number of resources lower than the predetermined maximum number of resources.

8. Scalable monitoring method according to claim 7, characterized in that the means for configuring a synthesis node comprise means for searching, in a table stored in the storage means of a resource, for the name of the indicator agent or agents required to calculate the indicator of the synthesis agent, and means for subscribing the synthesis agent to the indicator agents found during the search step, these subscription means allowing each synthesis agent to automatically receive, in its subscription table stored in the storage means, the new values of the indicators found.

9. Scalable monitoring method according to claim 8, characterized in that the search means comprise means for the sending by the synthesis agent of a notification to a naming service dedicated to storing, in a table stored in the storage means of a resource, the associations between subdomain name, an indicator agent and an indicator, this notification comprising the name of a given subdomain and a given indicator, and means for the sending by the naming service of a notification to the requesting synthesis agent, comprising the name of the indicator agent or agents corresponding to the association of the given subdomain and the given indicator.

10. Scalable monitoring method according to any of claims 7 through 9, characterized in that the modification means comprise means for creating and storing at least one indicator agent in each new resource added to a subdomain, means for sending, to the synthesis agents requiring the value of the indicator of the new indicator agent or agents, a notification comprising the identification of the new indicator agents or agents, means for subscribing each synthesis agent to the new indicator agents required to calculate the indicator of the synthesis agent.

11. Scalable monitoring method according to any of claims 7 through 10, characterized in that the modification means comprise means for selecting, for each subdomain of the resources to be deleted, means for sending, to the synthesis agents using the value of the indicator of the indicator agent or agents installed in the selected resource or resources, a notification comprising the identification of the deleted indicator agent or agents, and means for unsubscribing the synthesis agents from the indicator agents whose identifications are contained in the notification.

12. Scalable monitoring method according to any of claims 7 through 11, characterized in that the maximum number of resources per subdomain is determined either so that the cost of calculating the indicators is as low as possible, or so that the number of synthesis nodes is as low as possible.

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